

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

Claim 1 - 5 (Cancelled)

Claim 6 (Currently Amended): An electronic commercial transaction supporting system, comprising:

a shop, connected to a network, configured to present merchandise to customers via the network; and

a business information management system connected to the network, wherein said shop includes:

a correspondence generating unit configured to specify correspondence relations between attributes that are objects of interest for a plurality of respective customers and attributes of the merchandise subjects in an electronic commercial transaction at an actual stage of the electronic commercial transaction, based on an equivalence relation which satisfies a reflexive law, a symmetric law and a transitive law, the correspondence generating unit also configured to extract, by a cellular decomposition operation, one or more of the specified correspondence relations as a common subspace satisfying a necessary condition for concluding the electronic commercial

transaction by decomposing a set of attributes into nonempty disjoint equivalence classes according to the equivalence relation;

a table associated with the shop and configured to record the extracted correspondence relations; and

a correspondence presenting unit configured to present the extracted correspondence relations to subsequent customers ~~the subjects in the~~ in subsequent electronic commercial transactions in a manner such that the common subspace satisfying a necessary condition for concluding ~~[[the]]~~ prior electronic commercial transactions is attached to cellular spaces corresponding to the subsequent customers ~~subjects in the~~ subsequent electronic commercial transactions by a cell attaching operation,

wherein, ~~the specifying of under the equivalence relation, the correspondence generating unit is configured to specify a~~ correspondence relation between attributes that are objects of interest for the plurality of respective customers and attributes of the merchandise comprises:

specifying a correspondence relation between search information input by the customer at the time of a search and information about merchandise selected by the customer in concluding the electronic commercial transaction ~~search keywords which the customer gave at the time of search for a desired merchandise, and information, utilized by the customer, among information on the merchandise presented by said shop as a result of search, and~~

~~is configured to inspecting~~ a history of prior electronic commercial transactions to determine whether the specified correspondence relation is a new correspondence relation, ~~in which case~~ because the search information keywords was not previously corresponded to the information about the merchandise presented by said shop, and where the specified correspondence relation is a new correspondence relation, the search information defining the new correspondence relation is [[are]] corresponded to ~~the information utilized by the customer among~~ information on the merchandise selected in concluding the electronic commercial transaction [[,]] as a new attribute and recorded in the table, wherein the correspondence presenting unit is configured to read out and present the correspondence relations stored in the table at a stage of a subsequent another electronic commercial transaction, and wherein said business information management system includes a functional block configured to refer transversely to respective tables of a plurality of shops.

Claim 7 (Previously Presented): A system according to Claim 6, wherein said business information management system further includes a second functional block configured to detect a desired correspondence relation from said correspondence relations recorded in the table of any of said plurality of shops.

Claim 8 (Previously Presented): A system according to Claim 7, wherein said business information management system further includes a third functional block configured to present the detected desired correspondence relation at an actual stage of an electronic commercial transaction at another shop.

Claim 9 (Previously Presented): A system according to Claim 6, wherein said shop further includes a local business information management block configured to manage the table.

Claim 10 (Previously Presented): A system according to Claim 7, wherein said shop further includes a local business information management block configured to manage the table.

Claim 11 (Previously Presented): A system according to Claim 8, wherein said shop further includes a local business information management block configured to manage the table.

Claim 12 (Previously Presented): A system according to Claim 9, wherein said local information management block includes a maintaining functional block configured to inspect accumulating correspondence relations and to suitably modify the correspondence relations.

Claim 13 (Previously Presented): A system according to Claim 10, wherein said local information management block includes a maintaining functional block configured to inspect accumulating correspondence relations and to suitably modify the correspondence relations.

Claim 14 (Previously Presented): A system according to Claim 11, wherein said local information management block includes a maintaining functional block configured to inspect accumulating correspondence relations and to suitably modify the correspondence relations.

Claim 15 (Previously Presented): A system according to Claim 12, wherein said maintaining functional block is configured to detect mutually-contradicting correspondence relations among the accumulated correspondence relations and to keep the more appropriate correspondence relation while deleting the other correspondence relation from the table.

Claim 16 (Previously Presented): A system according to Claim 13, wherein said maintaining functional block is configured to detect mutually-contradicting correspondence relations among the accumulated correspondence relations and to keep the more appropriate correspondence relation while deleting the other correspondence relation from the table.

Claim 17 (Previously Presented): A system according to Claim 14, wherein said maintaining functional block is configured to detect mutually-contradicting correspondence relations among the accumulated correspondence relations and to keep the more appropriate correspondence relation while deleting the other correspondence relation from the table.

Claim 18-22 (Cancelled)

Claim 23 (New): An electronic commercial transaction supporting method, comprising:

- providing an e-mail having at least one e-shop, including:

 - an e-merchandise database, and

 - an attribute correspondence table;

- recording, within the e-merchandise database, an initial set of product attributes associated with a plurality of products;

- receiving a first customer query from a first e-customer via a network, said query including a set of first search attributes;

- presenting, to the first e-customer, first product results including at least one product selected from the plurality of products, the first product results based on:

 - the initial set of product attributes, and

 - the first search attributes;

- detecting if the first e-customer purchases a first product selected from the first product results;

determining if any attributes of the first search attributes did not previously exist in the attribute correspondence table, and for each such attribute:

defining such attribute as a new attribute, and

recording at least one new correspondence relationship between the new attribute and a product attribute that is associated with the first product in the attribute correspondence table; and

for at least one iteration:

receiving a subsequent customer query from a subsequent e-customer, said subsequent customer query including a set of subsequent search attributes;
presenting, to the subsequent e-customer, subsequent product results including at least one product selected from the plurality of products, the subsequent product results based on:

the initial set of product attributes,

the subsequent search attributes, and

the correspondence relationships recorded in the attribute
correspondence table;

detecting if the subsequent e-customer purchases a subsequent product selected from the subsequent product results;

determining if any attributes of the subsequent search attributes did not previously exist in the attribute correspondence table, and for each such attribute:

defining such attribute as a new attribute, and

recording at least one new correspondence relationship between the new attribute and a product attribute that is associated with the subsequent product in the attribute correspondence table.

Claim 24 (New): The electronic commercial transaction supporting method of claim 23, further comprising:

providing a business information management system, wherein the business information management system receives at least one of the first and subsequent customer queries, and wherein at least one of the first or subsequent product results are also based on correspondence relations recorded in attribute correspondence tables of any of a plurality of e-shops.

Claim 25 (New): The electronic commercial transaction supporting method of claim 23, further comprising:

detecting mutually-contradicting correspondence relations among the correspondence relations in the attribute correspondence table;

defining an apparently false correspondence relation from the mutually-contradicting correspondence relations based on statistical analysis; and

deleting the apparently false correspondence relation from the attribute correspondence table.